Physics 221  Sound, Optics, and Thermal Physics  Fall 2008

Prerequisite: Math 152 or 172; Phys. 208 and 218; registered in math 221 and 308.
Classes: MWF 12:40 – 1:30 pm, in BLOC 114.
Prof. Chia-Ren Hu,  ENPH 522,  845-3531,  E-mail: hu@physics.tamu.edu
Office Hours:  MF 2:15 to 3:15, or by email appointment.
Text:  Young and Freedman,  University Physics, 12th edition. 2007. Pearson Education
Inc. publishing as Addison Wedsley, 1301 Sansome St., San Francisco, CA, 94111.
(If in two volumes, need both vol. I and II.)
Grading: Exam I, II, III(=Final):  20% (60 minutes),  20% (60 minutes),
30% (120 minutes)
Homework  15%
Quizzes  15%
Assignments:
■ 12 (10 min.)-quizzes – lowest 2 scores will be dropped – no make-ups. Quizzes will cover
laws, concepts, terminology, etc. from reading assignment. (Date may be changed.)
■ Homework – 12 sets, lowest 2 scores will be dropped – no late homework accepted.
Tentative schedule: (will be followed unless change is required by circumstances)

<table>
<thead>
<tr>
<th>Week of:</th>
<th>Chap(s)</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light and Optics (quiz on Monday, HW due on Wednesday before class:)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aug. 25 – Aug. 29</td>
<td>33, 34</td>
<td>Nature and Propagation of Light (no quiz, no HW due)</td>
</tr>
<tr>
<td>Sept. 1 – Sept. 5</td>
<td>34</td>
<td>Geometric Optics (quiz 1, HW set 1 due, on Ch. 33.)</td>
</tr>
<tr>
<td>Sept. 8 – Sept. 12</td>
<td>34, 35</td>
<td>Interference (quiz 2, HW set 2 due, on Ch. 34.)</td>
</tr>
<tr>
<td>Sept. 15 – Sept. 19</td>
<td>35, 36</td>
<td>Diffraction (quiz 3, HW set 3 due, on Ch.35.)</td>
</tr>
<tr>
<td>Sept. 22 – Sept. 26</td>
<td>36</td>
<td>22th, Chap. 36. 24th review. 26th: Review and Ch. 13. (quiz 4, HW set 4 due, on Ch. 36.)</td>
</tr>
</tbody>
</table>

>>> Exam I Chapters 33-36, Wednesday Oct. 1 (unless changed in class.)
(Oct. 13 --- Mid-semester grades due)

| Oscillations and Waves (Quiz on Monday, HW due on Wednesday before class:) | |
| Sept. 29 – Oct. 3 | 13 | Periodic Motion (no quiz, no HW due) |
| Oct. 6 – Oct. 10 | 15 | Mechanical Waves (quiz 5. HW set 5 due, on Ch. 13.) |
| Oct. 13 – Oct. 17 | 16 | Sound and Hearing(quiz 6. HW set 6 due, on Ch. 15.) |
| Oct. 20 – Oct. 24 | 16, 17 | 20th: Chap. 16. 22th: Review. 24th: Ch. 17; (quiz 7, HW set 7 due, on Ch. 16.) |

>>> Exam II Chapters 13,15,16 Monday, Oct. 27 (Oct. 31 --- last day for Q-drop.)

| Thermal Physics (Quiz on Friday, HW due on the next Monday before class:) | |
| Oct. 27 – Oct. 31 | 17 | Temperature and Heat (quiz 8, on Ch. 17) |
| Nov. 3 – Nov. 7 | 18 | Thermal Properties of Matter (HW set 8 due, on Ch. 17; quiz 9, on Ch. 18.) |
| Nov.10 – Nov. 14 | 19 | First Law of Thermodynamics (HW set 9, on Ch. 18; quiz 10, on Ch. 19.) |
| Nov. 17 – Nov. 21 | 20 | Second Law of Thermodynamics (HW set 10 due, on Ch.19; quiz 11 on Ch. 20) |
Nov 24, 26   20   ditto (HW set 11 due, on Ch. 20;
               quiz 12 is on Nov. 26, on Ch. 20.)
Dec. 1           Review (HW set 12 due, on Ch. 20.)
               (Monday Dec. 1 is redefined day, meet for Friday class.)

>>> **Exam III on day of Final: Chapters 17 – 20, Monday Dec. 8, 10:30 am – 12:30 pm.**

(Dec. 15, Final grades due.)

**Americans with Disabilities Act (ADA) Policy Statement:**

(Approved by the University Curriculum Committee, March 7, 1997.
Approved by the Graduate Council, March 20, 1997.
Approved by the Faculty Senate, May 12, 1997.)

The following ADA Policy Statement (part of the Policy on Individual
Disabling Conditions) was submitted to the University Curriculum
Committee by the Department of Student Life. The policy statement was
forwarded to the Faculty Senate for information.

The Americans with Disabilities Act (ADA) is a federal anti-discrimination
statute that provides comprehensive civil rights protection for persons with
disabilities. Among other things, this legislation requires that all students
with disabilities be guaranteed a learning environment that provides for
reasonable accommodation of their disabilities. **If you believe you have a
disability requiring an accommodation, please contact the Department of
Student Life, Services for Students with Disabilities, in Room 126 of
the Koldus Building or call 845-1637.**

**Aggie Honor Code:**

**An Aggie does not lie, cheat, or steal or tolerate those who do.**

(See the Honor Council Rules and Procedures on the web:

**http://www.tamu.edu/aggiehonor.**)**